

INTERNATIONAL SEARCH REPORT

PCT/IB2004/001977

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L29/78 H01L29/423

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/43029 A (KRAUTSCHNEIDER WOLFGANG ; HOFMANN FRANZ (DE); SIEMENS AG (DE); WILLER) 26 August 1999 (1999-08-26)	1-5, 10
Y	abstract; figures 1-4 page 6, line 31 - page 11, line 34 page 19, lines 19-24; claims 1-11	6, 7
X	EP 0 735 589 A (TOKYO SHIBAURA ELECTRIC CO) 2 October 1996 (1996-10-02) column 9, line 45 - column 14, line 41; figures 8a, 8b, 53b, 54, 55 column 35, line 46 - column 38, line 29	1, 3, 5, 8, 10
X	US 5 142 640 A (IWAMATSU SEIICHI) 25 August 1992 (1992-08-25) the whole document	1-3, 9, 10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

28 January 2005

Date of mailing of the international search report

08/02/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2001/045599 A1 (HUETING RAYMOND J.E ET AL) 29 November 2001 (2001-11-29)	6,7
A	paragraphs '0009! - '0035!; figures 1,6-8 -----	1-5,8-10
A	TSENGYOU SYAU ET AL: "COMPARISON OF ULTRALOW SPECIFIC ON-RESISTANCE UMOSFET STRUCTURES: THE ACCUFET, EXTFET, INVFET, AND CONVENTIONAL UMOSFET'S" TRANSACTIONS OF THE IRE PROFESSIONAL GROUP ON ELECTRON DEVICES, IEEE INC. NEW YORK, US, vol. 41, no. 5, 1 May 1994 (1994-05-01), pages 800-808, XP000483878 cited in the application the whole document -----	1-10

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9943029	A	26-08-1999	WO	9943029 A1	26-08-1999
			EP	1060518 A1	20-12-2000
			TW	442949 B	23-06-2001
EP 0735589	A	02-10-1996	CN	1149203 A ,C	07-05-1997
			EP	0735589 A2	02-10-1996
			JP	8330601 A	13-12-1996
			KR	244671 B1	15-02-2000
			US	5828101 A	27-10-1998
US 5142640	A	25-08-1992	JP	1304779 A	08-12-1989
			JP	2023667 A	25-01-1990
			JP	2023668 A	25-01-1990
			JP	2780175 B2	30-07-1998
			JP	2023669 A	25-01-1990
			JP	2023670 A	25-01-1990
			KR	173111 B1	01-02-1999
US 2001045599	A1	29-11-2001	WO	0191190 A1	29-11-2001
			EP	1290735 A1	12-03-2003
			JP	2003534666 T	18-11-2003